

**LOW WANDER TIMING GENERATION AND RECOVERY**

**ABSTRACT OF DISCLOSURE**

The present invention teaches a variety of timing generation and recovery schemes for providing high precision clock synchronization in cascaded communications systems where each point of communication has a unique clock. To accomplish the high precision, one embodiment of the present invention teaches quantizing information related to phase relation between a master clock at the transmitter and a network link clock. This quantized phase information can be transmitted with very little bandwidth, recovered and the receiver and used to recover the timing information with high precision.